SERIE

# TA.CP

## LIGHT DUTY

Teste ad Angolo innovative, nate per tutte le macchine utensili, anche di piccole dimensioni e dagli ingombri contenuti, dove si richiedono performances elevate nonostante la capacità di peso limitata sul cambio utensile. Quindi Teste ad Angolo più leggere ma con qualità e affidabilità tipiche dei nostri prodotti.

L'obiettivo di contenere il peso è stato raggiunto costruendo il corpo in lega di alluminio aeronautico e adottando un sistema antirotante semplificato e alleggerito, pur rimanendo inalterata la modularità dei coni di attacco tipica della serie Heavy Duty.
La caratteristica principale di questa nuova generazione è di potere eseguire forature, maschiature e lamature su quelle macchine utensili dove il peso del cambio utensile ha forti limitazioni o quando i costi di produzione devono essere estremamente competitivi.

Caratteristiche comuni della Teste ad Angolo serie CP sono:
- perno antirotante conico che, al contrario dei perni cilindrici, elimina i giochi angolari
- possibilità di utilizzo su macchine dove già presente Stop-Block della serie Heavy Duty per una perfetta compatibilità di tutta la gamma
- sistema di orientamento testa ad angolo in macchina ottimizzato, per una più facile e rapida registrazione
- ingranaggi Gleason con evolvente rettificato
- lubrificazione long life
- peso estremamente ridotto per Teste ad Angolo con queste capacità di lavoro
- utilizzo su centri di lavoro di piccole dimensioni
- versioni anche prolungate per una maggiore flessibilità di gamma
- coni disponibili: DIN69871, BT, BBT, HSK, CAT.

*These angle heads introduce an innovative line targeting all the small machine-tools with restrained size, but with high performances despite limited weight on tool changer.*
*Therefore TA.CP angle heads are lighter but with both quality and reliability typical of our products.*

*Highlight of this line is the head body in aeronautical aluminium alloy combined with a simplified and lightened torque-arm system, allowing to maintain unchanged the back-end shank modularity characteristic of our Heavy Duty range.*
*The major feature of this new generation of angle heads is to be able to perform drilling, tapping and reaming operations on machine-tools with high limitations on tool changer weight, or when production costs must be extremely competitive.*

*The major specifications of the new TA.CP range are:*
- *conical (V-shape) torque-arm pin which eliminates any angular backlashes, unlike cylindrical type of pins*
- *possibility of using them on machines which are already equipped with a Stop-Block of the Heavy Duty range, getting them fully compatible with our complete range*
- *optimized indexing set-up for an easier and faster adjustment on machine-tools*
- *lubricated-for-life*
- *ground involute Gleason type gears*
- *extremely reduced weight in comparison to the capabilities and performances of this new range of angle heads*
- *usable on small size machining centres*
- *extended length versions available further completing this new range*
- *DIN69871, BT, BBT, HSK and CAT back-end shanks available*

# TA07.CP

## TESTA AD ANGOLO · *ANGLE HEAD*

PESO *WEIGHT*

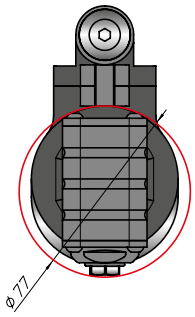
30 — 2,1 KG
40 — 2,5 KG

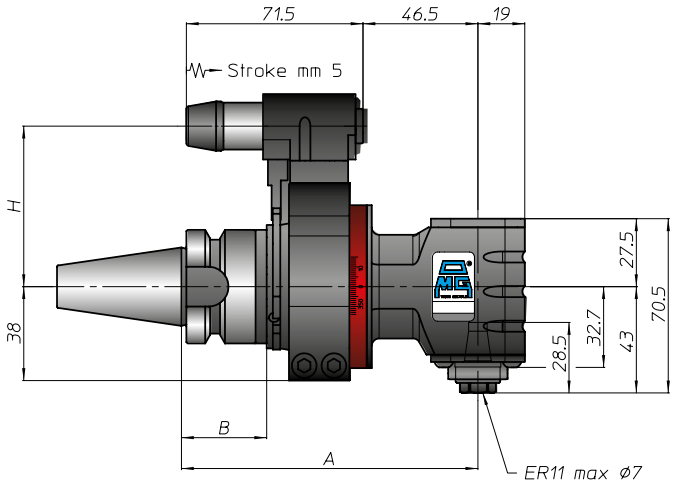
ROTAZIONE *ROTATION*

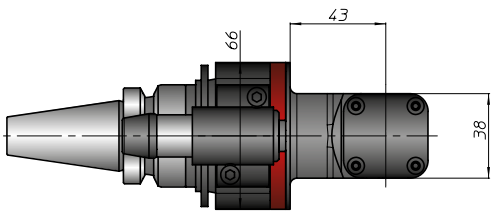
IN — INPUT
OUT — OUTPUT

CARATTERISTICHE *FEATURES*

| Ø7 | M6 | 150 N | 1-1 | 8000 | 5,6 |
|---|---|---|---|---|---|
| | | | | RPM | Nm |




| CONO *SHANK* | | DIN69871 | CAT ANSIB5.50 | BT | | HSK DIN69893 | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 30 | 40 | 40 | 30 | 40 | 63 | | | | |
| A | 120 | | 120 | 120 | | 129 | | | | |
| B | 35 | | 35 | 35 | | 44 | | | | |
| H STANDARD | 65 | | 65 | 65 | | 65 | | | | |
| H OPTIONAL | | | | | | | | | | |

# TA10.CP

## TESTA AD ANGOLO • *ANGLE HEAD*



PESO
*WEIGHT*

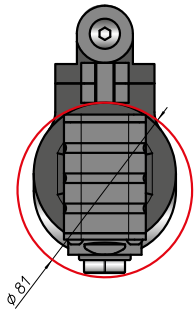
30 — 2,2 KG
40 — 2,5 KG

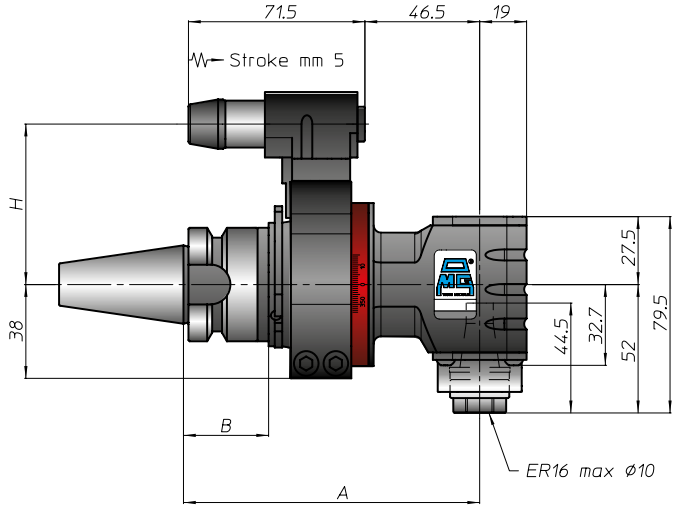
ROTAZIONE
*ROTATION*

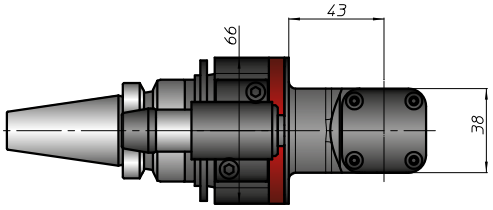
IN — INPUT → OUT — OUTPUT

CARATTERISTICHE
*FEATURES*

| Ø10 | M8 | 200 N | 1-1 | 7000 | 8 |
|---|---|---|---|---|---|
| | | | | RPM | Nm |




| CONO *SHANK* | DIN69871 | | CAT ANSIB5.50 | BT | | HSK DIN69893 | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 30 | 40 | 40 | 30 | 40 | 63 | | | | |
| A | 120 | | 120 | 120 | | 129 | | | | |
| B | 35 | | 35 | 35 | | 44 | | | | |
| H STANDARD | 65 | | 65 | 65 | | 65 | | | | |
| H OPTIONAL | | | | | | | | | | |

# TA13.CP

## TESTA AD ANGOLO · *ANGLE HEAD*

PESO *WEIGHT*

| 30 | 40 |
|---|---|
| 5 KG | 7,5 KG |

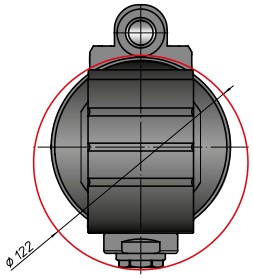
ROTAZIONE *ROTATION*

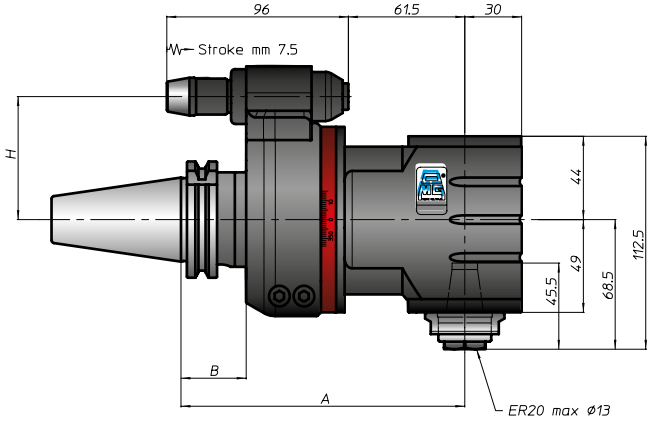
IN → OUT

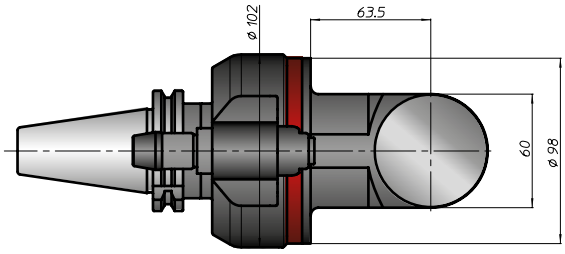
INPUT OUTPUT

CARATTERISTICHE *FEATURES*

| Ø13 | M10 | 560 N | 1-1 | 6000 | 19 |
|---|---|---|---|---|---|
| | | | | RPM | Nm |




| CONO *SHANK* | DIN69871 | | | | CAT ANSIB5.50 | | BT | | HSK DIN69893 | | | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 30 | 40 | 45 | 50 | 40 | 50 | 40 | 50 | 63 | 80 | 100 | | | | |
| A | 150 | | | | 150 | | 150 | 158 | 159 | | | | | | |
| B | 35 | | | | 35 | | 35 | 45 | 44 | 46 | | | | | |
| H STANDARD | 65 | | 80 | | 65 | 80 | 65 | 80 | 65 | 80 | | | | | |
| H OPTIONAL | | | | | | | | | | | | | | | |

# TA13.CPL

## TESTA AD ANGOLO · *ANGLE HEAD*



**PESO** *WEIGHT*

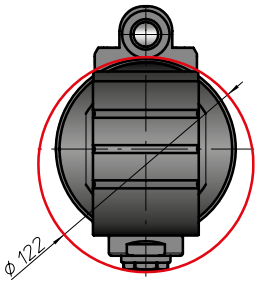
30 — 5,7 KG
40 — 8 KG

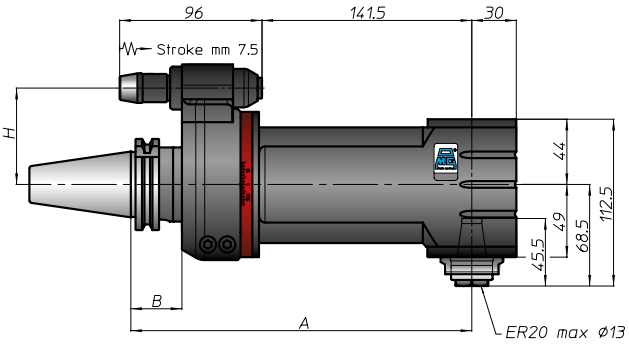
**ROTAZIONE** *ROTATION*

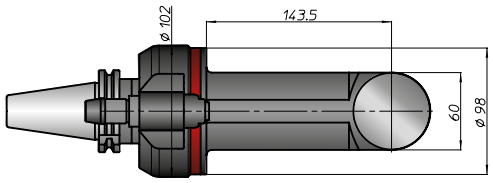
IN — INPUT → OUT — OUTPUT

**CARATTERISTICHE** *FEATURES*

| Ø13 | M10 | 560 N | 1-1 | 6000 RPM | 19 Nm |
|---|---|---|---|---|---|




| CONO *SHANK* | DIN69871 | | | | CAT ANSIB5.50 | | BT | | HSK DIN69893 | | | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 30 | 40 | 45 | 50 | 40 | 50 | 40 | 50 | 63 | 80 | 100 | | | | |
| A | 230 | | | | 230 | | 230 | 238 | 239 | | | | | | |
| B | 35 | | | | 35 | | 35 | 45 | 44 | 46 | | | | | |
| H STANDARD | 65 | 80 | | | 65 | 80 | 65 | 80 | 65 | 80 | | | | | |
| H OPTIONAL | | | | | | | | | | | | | | | |

# TA16.CP

## TESTA AD ANGOLO · *ANGLE HEAD*

PESO *WEIGHT*

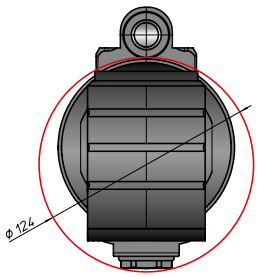
30 5 KG — 40 7,5 KG

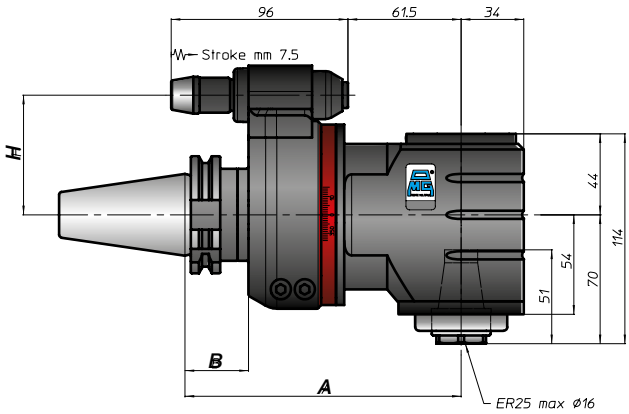
ROTAZIONE *ROTATION*

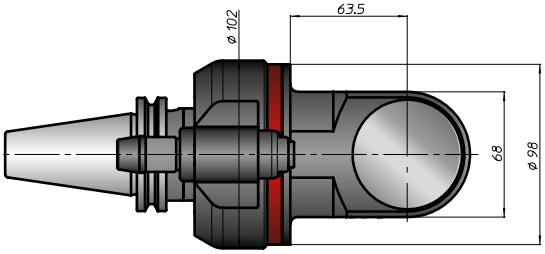
IN INPUT → OUT OUTPUT

CARATTERISTICHE *FEATURES*

| Ø16 | M12 | 850 N | 1-1 | 4000 RPM | 30 Nm |
|---|---|---|---|---|---|




| CONO *SHANK* | DIN69871 | | | CAT ANSIB5.50 | | BT | | HSK DIN69893 | | | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 40 | 45 | 50 | 40 | 50 | 40 | 50 | 63 | 80 | 100 | | | | |
| A | 150 | | | 150 | | 150 | 158 | 159 | | | | | | |
| B | 35 | | | 35 | | 35 | 45 | 44 | 46 | | | | | |
| H STANDARD | 65 | 80 | | 65 | 80 | 65 | 80 | 65 | 80 | | | | | |
| H OPTIONAL | | | | | | | | | | | | | | |

# TA16.CPL

## TESTA AD ANGOLO · *ANGLE HEAD*



PESO *WEIGHT*

30 — 6,5 KG
40 — 8,5 KG

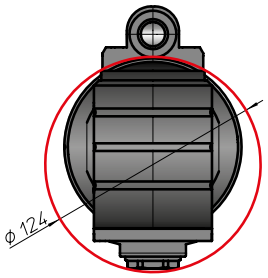
ROTAZIONE *ROTATION*

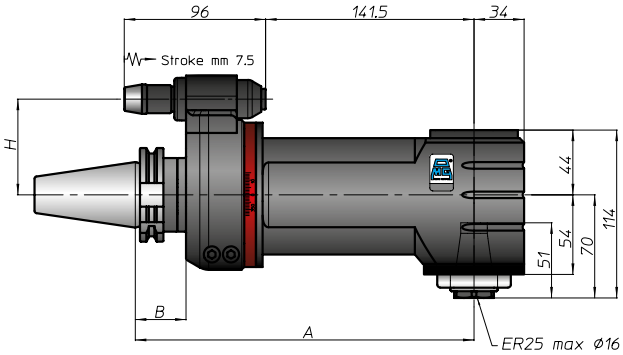
IN → OUT

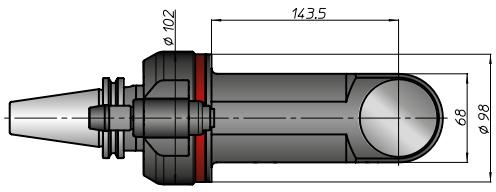
INPUT — OUTPUT

CARATTERISTICHE *FEATURES*

| Ø16 | M12 | 850 N | 1-1 | 4000 | 30 |
|---|---|---|---|---|---|
| | | | | RPM | Nm |




| CONO *SHANK* | | CAT ANSIB5.50 | | BT | | HSK DIN69893 | | | CAPTO ISO26623 | KM | | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | 40 45 50 | 40 | 50 | 40 | 50 | 63 | 80 | 100 | | | DIN2080 | |
| A | 230 | 230 | | 230 | 238 | 239 | | | | | | |
| B | 35 | 35 | | 35 | 45 | 44 | 46 | | | | | |
| H STANDARD | 65 80 | 65 | 80 | 65 | 80 | 65 | 80 | | | | | |
| H OPTIONAL | | | | | | | | | | | | |

# TAV07.CP

## TESTA AD ANGOLO · *ANGLE HEAD*

PESO *WEIGHT*

| 30 | 40 |
|---|---|
| 2,2 KG | 2,6 KG |

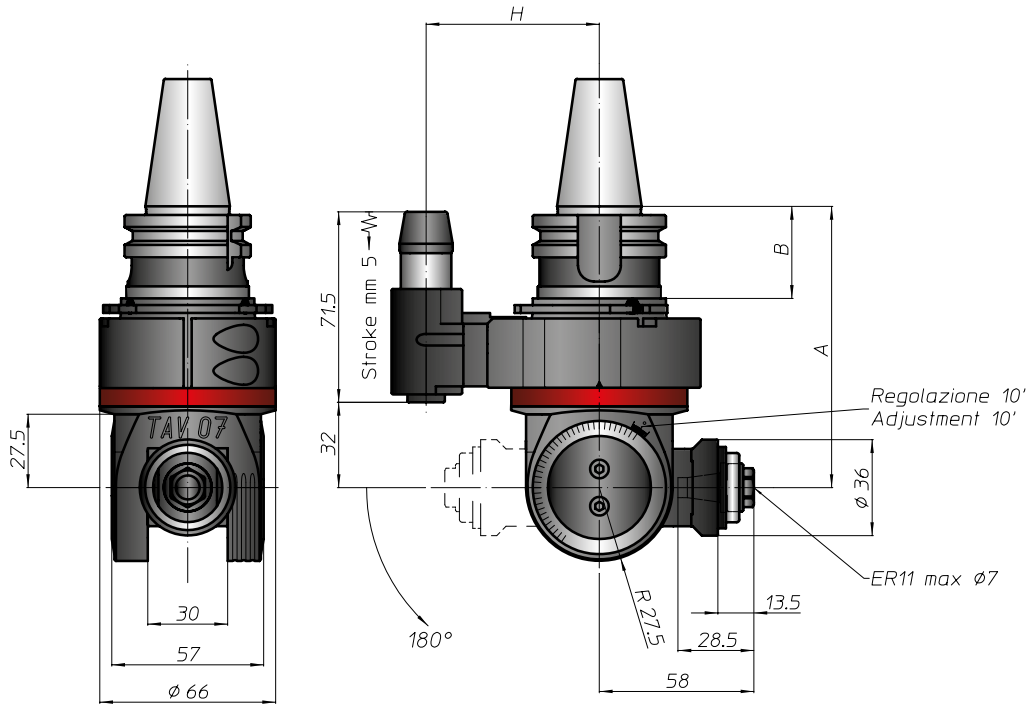
ROTAZIONE *ROTATION*

IN → OUT

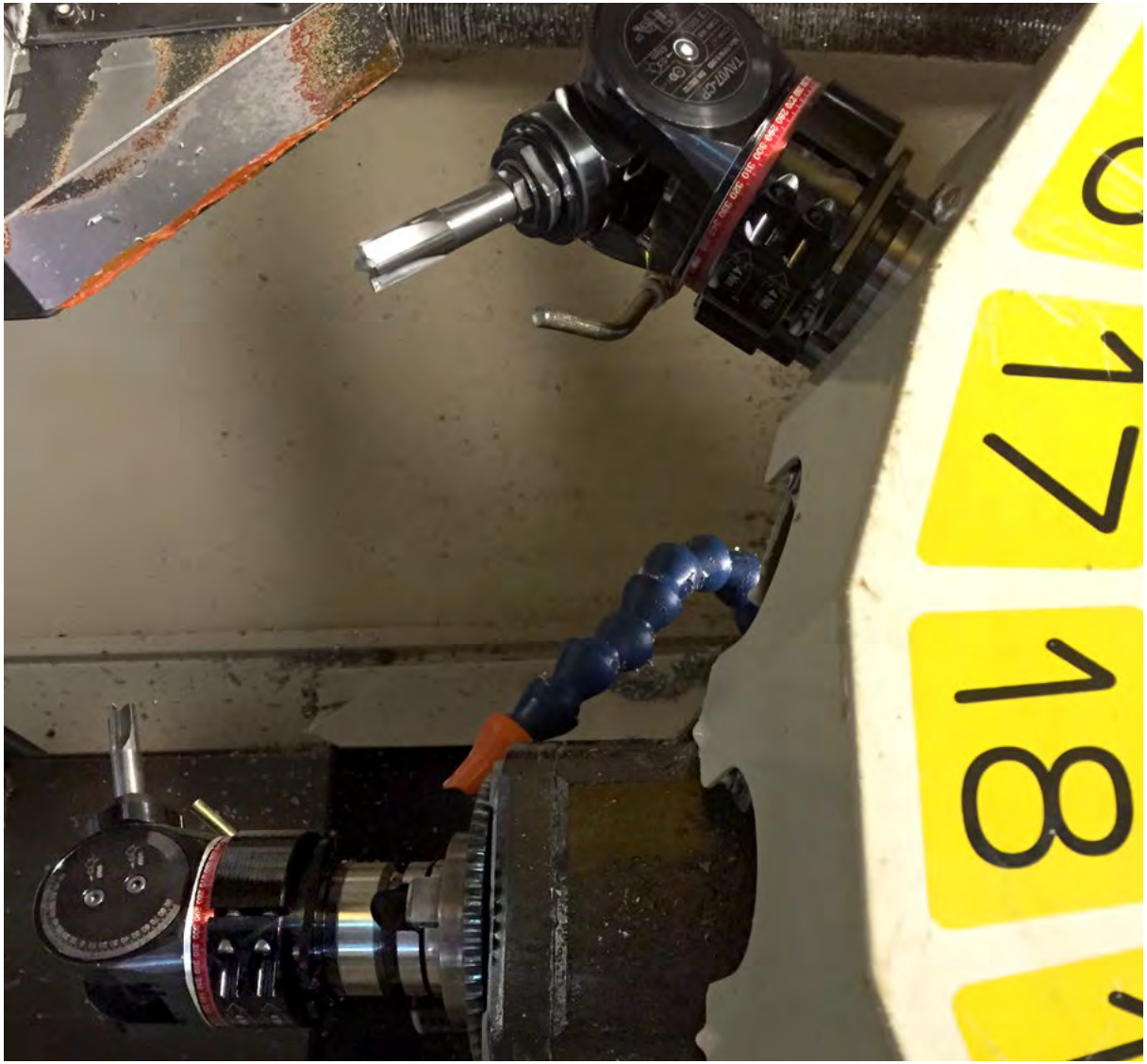
INPUT OUTPUT

CARATTERISTICHE *FEATURES*

| Ø7 | M6 | 85 N | 1-1 | 8000 | 5,6 |
|---|---|---|---|---|---|
| | | | | RPM | Nm |




| CONO *SHANK* | | DIN69871 | CAT ANSIB5.50 | BT | HSK DIN69893 | CAPTO ISO26623 | KM | DIN2080 | NMTB ANSIB5.18 |
|---|---|---|---|---|---|---|---|---|---|
| SIZE | 30 | 40 | 40 | 30 | 40 | 63 | | | | |
| A | 105,5 | | 105,5 | 105,5 | | 114,5 | | | | |
| B | 35 | | 35 | 35 | | 44 | | | | |
| H STANDARD | 65 | | 65 | 65 | | 65 | | | | |
| H OPTIONAL | | | | | | | | | | |

# TA.CP

GALLERY

# ANTIROTANTE
# TORQUE ARM

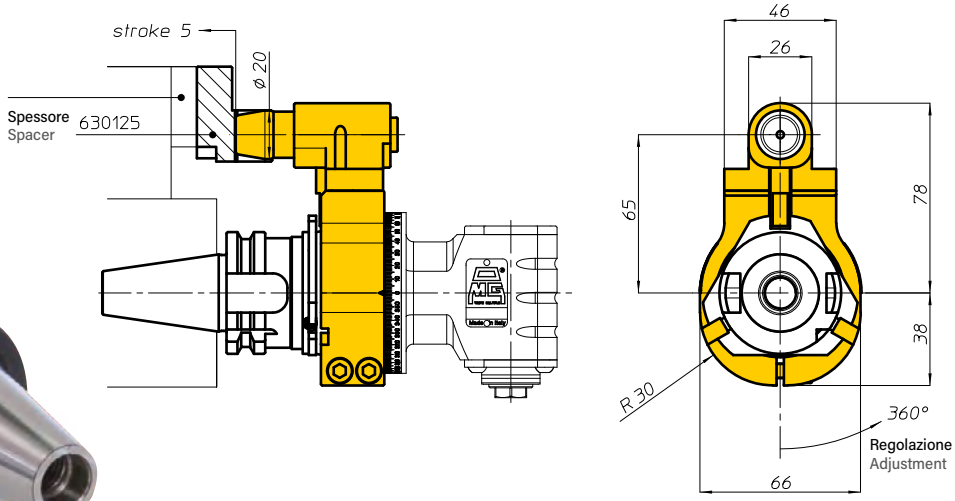
Il gruppo antirotante ricopre una funzione di fondamentale importanza nella qualità di lavorazione della testa ad angolo. Per questo motivo i tecnici della OMG hanno studiato e messo a punto un antirotante di nuova concezione i cui punti salienti sono:

- il perno conico
- registrazione flangia di fasatura semplice, veloce e precisa.

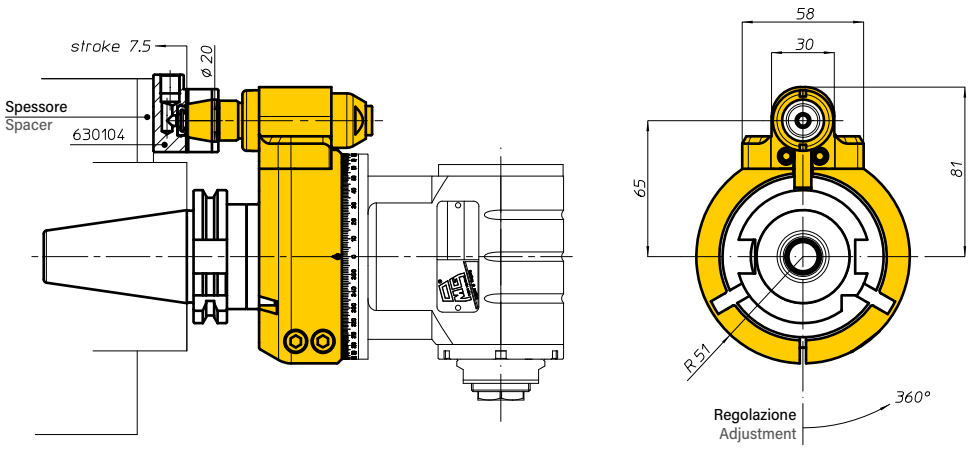
Il perno conico permette una maggiore rigidità del sistema antirotante rispetto ai tradizionali, dotati di perni di Ø18 mm, perché si eliminano i giochi. Conseguenza un miglioramento della rigidità sia angolare che assiale.
Il perno conico è forato e perciò predisposto per il passaggio del liquido refrigerante ad un max di 10 bar. Qualora il cliente volesse portare il liquido vicino all'utensile, occorre semplicemente installare un piccolo tubo.

Quando possibile, nella Vostra applicazione, posizionate il perno conico dalla parte opposta al mandrino della testa ad angolo.

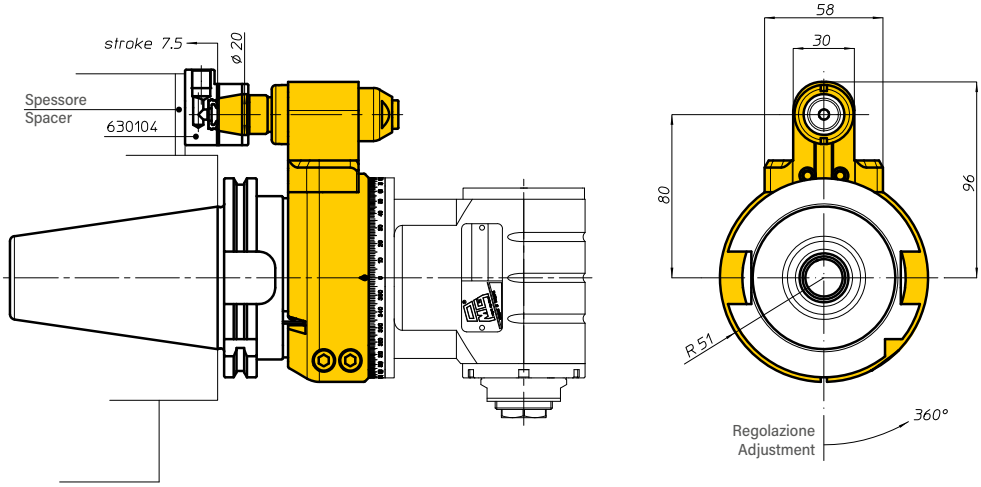
## TESTE AD ANGOLO TA07.CP, TAV07.CP
## *ANGLE HEADS TA07.CP, TAV07.CP*



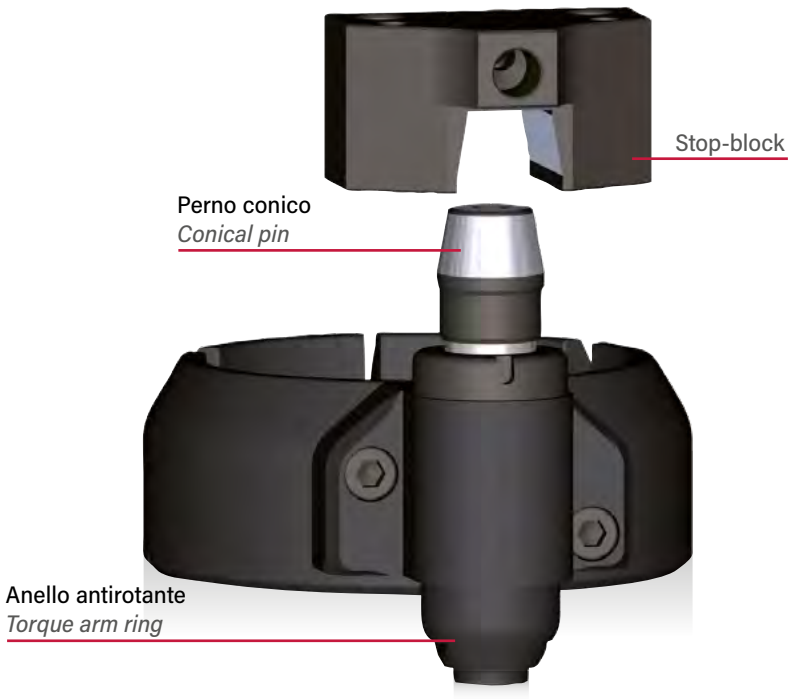

## TESTE AD ANGOLO TA13.CP, TA16.CP CON INTERASSE H=65
## *ANGLE HEADS TA13.CP, TA16.CP WITH CENTRE DISTANCE H=65*




## TESTE AD ANGOLO TA13.CP, TA16.CP CON INTERASSE H=80
## *ANGLE HEADS TA13.CP, TA16.CP WITH CENTRE DISTANCE H=80*



# STOP-BLOCK

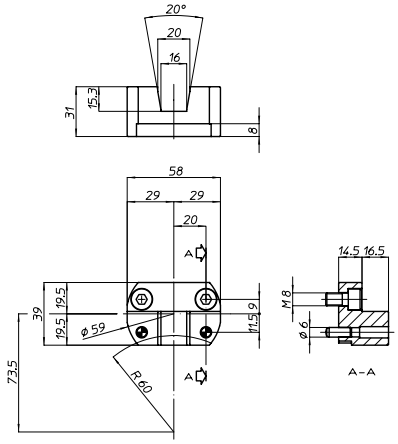



*The torque-arm system is fundamental to achieve high quality machining results.*
*This is why the OMG technicians have engineered and fine tuned a new generation torque-arm system with following characteristics:*

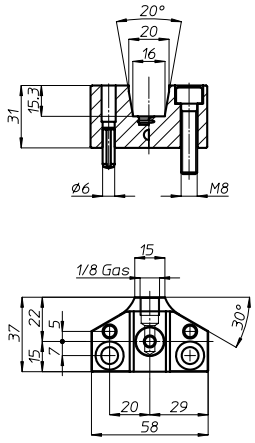
- *conical (V-shape) timing pin*
- *simple, fast and precise timing pin adjustment*

*The conical (V-shaped) pin ensures a higher rigidity to the torque-arm system (than the traditional ones equipped with ø18 mm pins) because cancelling backlashes. The result is the enhancement of both angular and axial rigidity.*
*The conical timing pin is equipped with a hole and therefore prepared to let coolant through it up to max 10 bar. When customer needs coolant close to the tool, he can install just a small pipe.*

**STOP-BLOCK (COD. 630125)**



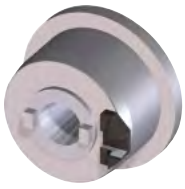

**STOP-BLOCK (COD. 630104)**



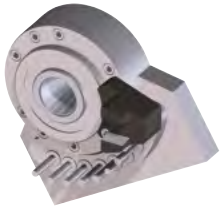

## Stop-block preparati per

## *Stop-block made for*

**HAAS**



**DMG Milltap**



**Mectron**

**Brother**

**Fanuc Robodrill**

*Position the conical pin on the opposite side of the angle head spindle when possible in your application.*